

SACM CHECKLIST				CERCLIS No. OKD001010917	
PART I - SITE LOCATION AND ASSESSMENT INFORMATION				State OK	SSID
Site Name and Address Wilcox Refinery Refinery Road Bristow, OK					
City Bristow	State OK	Zip	County Creek	County Code	Cong Dist
Physical Location (directions to site) Travel West on I-44 from Tulsa for 35 miles; exit state highway 66 and continue south about 0.5 mile to an unnamed section of line road; turn left at section line road and travel 0.2 mile east until you reach the site.					
Latitude 35°50'31" Longitude 96°23'02"			Quadrangle Name Bristow, OK		
Source (topo)			Section 29	Township 16N	Range 9E
Point on the site at which it was calculated (geographical center, entry gate, etc.)					
Datum					
Type of Ownership <input type="checkbox"/> Municipal <input checked="" type="checkbox"/> Private <input type="checkbox"/> Federal <input type="checkbox"/> Indian Nation <input type="checkbox"/> State <input type="checkbox"/> County <input type="checkbox"/> Other _____					
Assessment Information				Ref. #(s) _____	
Date 6/13/97		Site Status <input type="checkbox"/> Active <input checked="" type="checkbox"/> Inactive <input type="checkbox"/> Not Specified		Years of Operation <input type="checkbox"/> Unknown 1928 / 1963 Begin End	
Agency Performing Inspections				Ref. #(s) _____	
Primary Inspectors	Title	Organization	Telephone		
David Crow	EPA-START	Ecology and Environment	214/220-0318		
Ben Martich	EPA-START	Ecology and Environment	214/220-0318		
Other Inspectors					
Site Representatives Interviewed/Contacted					
Access Gained By <input type="checkbox"/> Verbal Consent <input type="checkbox"/> Written Consent off-site inspection <input type="checkbox"/> Warrant		Time 0815	Weather rain then partly sunny		

Site Identified <input type="checkbox"/> Federal <input checked="" type="checkbox"/> State/Local <input type="checkbox"/> Citizen Complaint <input type="checkbox"/> Other _____	CERCLIS Identification Date OKD001010917	EPA Contact Lon Biasco Telephone Number 214/665-6673
PART II - SITE BACKGROUND AND REGULATORY STATUS		
Owner/Operator History		Ref. #(s) _____
Current	(b) (6)	
	First Assembly Church of God	
Previous	Wilcox Oil Company	
Site Regulatory History PA by OD5Q, ESI by EPA		Ref. #(s) _____
Permits <input type="checkbox"/> NPDES <input type="checkbox"/> State Permits <input type="checkbox"/> UIC <input type="checkbox"/> RCRA Part A <input type="checkbox"/> RCRA Part B <input type="checkbox"/> Local Permits <input type="checkbox"/> Air <input type="checkbox"/> TACB <input type="checkbox"/> SPCC Plan <input type="checkbox"/> Other _____		
<u>Dates and Description of Previous Investigations</u>		
PRP Search by EPA on December 9, 1994		
Expended Site Investigation (ESI) for EPA by Wester, Inc., in 1996		
PA by the Oklahoma Department of Environmental Quality (ODEQ) on 12/15/94		
<u>Dates and Description of Previous Removal Actions</u>		
None		
<u>Dates and Description of Previous State or RCRA Corrective Actions</u>		
None		

PART III - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS**Potential Threat of Fire and/or Explosion**

Unlikely based on existing information.

i.e. Unstable hazardous materials stored on-site, reactive materials disposed of together, former military site with unexploded ordnance?

Potential Threat of Direct Contact With Hazardous Substances

Unlikely based on existing information.

i.e. Unrestricted public access to exposed hazardous substances, runoff carries hazardous substances to surface water bodies, hazardous substances have migrated onto residential properties, population or workers exposed or injured (date, #)?

☒ Y ☐ N Waste fenced/access restricted (explain)

Condition of fence:

If fencing needed, estimate dimensions required:

Potential Threat of a Continuous Release of Hazardous Substances

Based on previous investigations, former tank containment features (berms) have been cut or leveled; therefore, allowing surface migration of contaminants from on-site sources.

i.e. Sources are poorly contained possibly threatening ground water, surface impoundments with inadequate diking near a surface water body, contamination of sewers or storm drains, lack of cover to prevent air release?

Potential Threat of Drinking Water Contamination

On-site domestic wells have been closed or abandoned due to oil contamination.

ESI reports groundwater is a major concern because of shallow groundwater use and because the site is located above an aquifer recharge area.

i.e. Threatened water intakes, suspected release to ground water where private residences rely on shallow ground water for drinking, underground storage tanks near public supply wells, private well users have reported foul-smelling and or tasting water?

Removal Considerations

Repair of secondary containment features; therefore, reducing the potential release to nearby Sandy Creek.

i.e. Containerize leaking drums, fences, security, capping, stabilizing waste, physical removal, pumping lagoons, air monitoring, field screening, preliminary sampling, etc.

PART IV - SAMPLES/FIELD SCREENING INFORMATION**Field Screening**

☐ OVA ☐ Monitox Specify
☐ HNu ☐ Air Monitoring
☐ XRF ☐ Field Test Kit
☐ AIM ☐ Draeger Tube (type & tube id#)
☐ Hazcat ☐ Other

Summary of Field Screening Results**Samples Collected**

Sample Type	Number of Samples Taken	Samples Sent To	Estimated Date Results Available
Ground Water			
Surface Water			
Waste			
Air			
Runoff			
Spill			
Soil/Sediment			
Vegetation			
Other			

PART V - A. CERCLA ELIGIBILITY

Ref. #(s) _____

[X]Y []N Did the facility cease operations prior to November 19, 1980?
 If yes, stop, site is CERCLA eligible. If no, proceed to Part B

B. RCRA ELIGIBILITY

Ref. #(s) _____

- [] Y [X] N Did the facility file a RCRA Part A application? If yes:
- [] Y [X] N 1. Does the facility currently have interim status?
- [] Y [X] N 2. Did the facility withdraw its Part A application?
- [] Y [X] N 3. Is the facility a known or possible protective filer?
- [] Y [X] N 4. Type of facility:
 Generator____ Transporter____ Recycler____ Treatment/Storage/Disposal (TSD)____
- [] Y [X] N Does the facility have a RCRA operating or post closure permit?
- [] Y [X] N Is the facility a late (after 11/19/90) or non-filer that has been identified by the EPA or State?

If all answers to questions in Part B are NO, stop, the facility is CERCLA eligible. If answers to 2 or 3 are YES, stop, the facility is CERCLA eligible. If answers to 2 and 3 are NO and any other answer is YES, site is RCRA, continue to Part C.

C. RCRA SITES ELIGIBLE FOR NPL

Ref. #(s) _____

- [] Y [] N Has the facility owner filed for bankruptcy under federal or state laws?
- [] Y [] N Has the facility lost RCRA authorization to operate or shown probable unwillingness to carry out corrective action?
- [] Y [] N Is the facility a TSD that converted to a generator, transporter or recycler after November 19, 1980?

D. EXEMPTED SUBSTANCES

Ref. #(s) _____

- [X] Y [] N Does the release involve hazardous substances other than petroleum including crude oil or any fraction thereof? If yes, site is CERCLA eligible. **Tank bottom waste**

PART VI - SITE ASSESSMENT RECONNAISSANCE☐ On-Site☐ Windshield**a. General Site Characteristics**

Ref. #(s) _____

Predominant Land Uses Within 1 Mile

- | | | |
|---|--------------------------------------|---|
| <input type="checkbox"/> Industrial | <input type="checkbox"/> Agriculture | <input type="checkbox"/> DOI |
| <input type="checkbox"/> Commercial | <input type="checkbox"/> Mining | <input type="checkbox"/> Other Federal Facility |
| <input checked="" type="checkbox"/> Residential | <input type="checkbox"/> DOD | _____ |
| <input type="checkbox"/> Forest/Fields | <input type="checkbox"/> DOE | <input type="checkbox"/> Other _____ |

Site Setting

- ☐ Urban
- ☐ Suburban
- ☒ Rural
- ☐ Other _____

**Approximate
Size**
 Acres: 108
 or Square
 Feet:

Type of Site Operations (check all that apply)		Waste Generated
<input type="checkbox"/> Manufacturing (must check subcategory) <input type="checkbox"/> Lumber and Wood Products <input type="checkbox"/> Inorganic Chemicals <input type="checkbox"/> Plastic and/or Rubber Products <input type="checkbox"/> Paints, Varnishes <input type="checkbox"/> Industrial Organic Chemicals <input type="checkbox"/> Agricultural Chemicals (e.g., pesticides, fertilizers) <input type="checkbox"/> Miscellaneous Chemicals Products (e.g., adhesives, explosives, ink) <input type="checkbox"/> Primary Metals <input type="checkbox"/> Metal Coating, Plating, Engraving <input type="checkbox"/> Metal Forging, Stamping <input type="checkbox"/> Fabricated Structural Metal Products <input type="checkbox"/> Electronic Equipment <input type="checkbox"/> Other Manufacturing <input type="checkbox"/> Mining <input type="checkbox"/> Metals <input type="checkbox"/> Coal <input type="checkbox"/> Oil and Gas <input type="checkbox"/> Non-metallic Minerals	<input type="checkbox"/> Retail <input type="checkbox"/> Recycling <input type="checkbox"/> Junk/Salvage Yard <input type="checkbox"/> Municipal Landfill <input type="checkbox"/> Other Landfill <input type="checkbox"/> DOD <input type="checkbox"/> DOE <input type="checkbox"/> DOI <input type="checkbox"/> Other Federal Facility _____ <input type="checkbox"/> RCRA <input type="checkbox"/> Treatment, Storage, or Disposal <input type="checkbox"/> Large Quantity Generator <input type="checkbox"/> Small Quantity Generator <input type="checkbox"/> Subtitle D <input type="checkbox"/> Municipal <input type="checkbox"/> Industrial <input type="checkbox"/> "Converter" <input type="checkbox"/> "Protective Filer" <input type="checkbox"/> "Non- or Late Filer" <input type="checkbox"/> Not Specified <input checked="" type="checkbox"/> Other <u>Refining</u>	<input checked="" type="checkbox"/> On-site <input type="checkbox"/> Off-site <input type="checkbox"/> On-site and Off-site Visible Soil Types <input type="checkbox"/> Gravel <input type="checkbox"/> Bedrock <input checked="" type="checkbox"/> Silt <input checked="" type="checkbox"/> Sand <input checked="" type="checkbox"/> Clay <input type="checkbox"/> Other _____ <p style="font-size: small;">While in the area, if possible, contact the local soil conservation service to obtain a copy of the soil survey for the county or parish in which the site is located.</p>
Operational history, background, processes, waste disposal, etc. <p>Wilcox Oil Co., operated as a crude oil refinery from the 1920s until 1963. From 1920 to 1928, it operated at a pilot production rate of 1,000 bbls/day. The facility was upgraded in 1929 and had and operated at a capacity of 4,000 bbls/day. Main components consisted of a skimming plant, cracking unit, redistillation battery with vapor recovery system, and continuous treating equipment.</p>		
b. Source Characterization Indicate type(s) and quantity of sources on-site. Complete and attach a source characterization form (SCF) for each source and summarize the SCF on the following table (photodocument source and mark appropriate location on site sketch).		
1. Physical States (Enter all that apply by # in Column B) 1. Solid 2. Powder, fines 3. Sludge 4. Slurry 5. Liquid 6. Gas 7. Other _____	2. Waste Characteristics (Enter all that apply by # in Column C) 1. Toxic 2. Corrosive 3. Radioactive 4. Persistent 5. Soluble 6. Infectious 7. Flammable 8. Ignitable 9. Highly Volatile 10. Explosive 11. Reactive 12. Incompatible 13. Not Applicable N/A	3. Treatment (if known) (Enter all that apply by # in Column D) 1. Incineration 2. Underground Injection 3. Chemical/Physical 4. Biological 5. Waste Oil Processing 6. Solvent Recovery 7. Other Recycling Recovery 8. Other _____ (Specify)

A Source Type	B Enter #(s) from Box 1	C Enter #(s) from Box 2	D Enter #(s) from Box 3	E Active/ Inactive	F Estimated Quantity, Area or Volume (include units of measure)	G Description or Use Comments
Landfill (4)	1,3,5	1,2		In	23000 yd ²	areas that contain solids, liquids and sludges runoff enter and leaves these
Drums (4 areas)	1	1,2		In	500 yd ²	church 2 residences, and unvegetated area
Surface Impoundments						
Soil						
Tanks/Non-Drum Containers						
Land Treatment/Landfarm						
Piles (Tank Bottom -11)	1,3	1,2		In	7500 yd ²	bermed areas that had volumes from 1000-55000 barrels
Fire/Burn Pits						
Other/Additional						

Overall containment of wastes (check one)

☐ Adequate (secure) ☐ Moderate ☒ Inadequate (poor) ☐ Insecure (unsound, dangerous)

Evidence of migration from source area, description of diking, liners, barriers, engineered covers, run-on or runoff control systems, etc.

Refer to previous site investigations

Estimate the percentage of the site's surface that is

☒ Exposed soil 50% ☒ Covered by buildings 5% ☐ Covered by pavement ☒ Covered by vegetation 45%
☐ Covered by water

List the presence (or absence) and type of plants observed on-site. If known, estimate percentages of different vegetative types (ie. tree canopy, shrubs, grass, ground cover, weeds, etc.).

Based on off-site inspection, the site is densely vegetated.

Describe any evidence or observation of animal species while on-site.

Turtles observed on railroad.
 Fire ants observed.

Describe any known or observed recreational uses or human presence on the site (e.g., fishing, biking, footprints, tire tracks, vandalism, etc.). (Photodocument)

Two residences and one church on site.

General Types of Waste (check all that apply)

- | | |
|--|---|
| <input type="checkbox"/> Metals | <input type="checkbox"/> Pesticides/Herbicides |
| <input type="checkbox"/> Organics | <input checked="" type="checkbox"/> Acids/Bases |
| <input type="checkbox"/> Inorganics | <input checked="" type="checkbox"/> Oily Waste |
| <input type="checkbox"/> Solvents | <input type="checkbox"/> Municipal Waste |
| <input type="checkbox"/> Paints/Pigments | <input type="checkbox"/> Mining Waste |
| <input type="checkbox"/> Laboratory/Hospital Waste | <input type="checkbox"/> Explosives |
| <input type="checkbox"/> Radioactive Waste | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> Construction/Demolition Waste | |

Specify substances below, if known (active facilities provide manifests, analytical data available)

HAZARDOUS SUBSTANCES

Category	Substance Name	Storage/Disposal Method	Concentration (include units of measure)
	TPH		85700 mg/kg
	lead		47000 mg/kg
	pyrene		54000 µg/kg
	xylenes		450 µg/kg
	Results from EPA ESI		

PART VII - SITE SKETCH (attached)

(Include north arrow, topography, distances, buildings, drainages, sources, stained soils, fences, etc.)

PART VIII - PHOTODOCUMENTATION (labeled photos attached)

(Include panoramas, targets, sources, recreation, stressed vegetation, sampling locations, etc.)

PART IX - TARGETS

a. Ground Water Pathway Ref.#(s) _____		Target Distance Limit (TDL) = 4 Mile Radius
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N During the site visit, did you field verify all ground water targets within a half mile?		Distance to nearest drinking water well ¼ Miles _____ Feet
<input checked="" type="checkbox"/> Y <input type="checkbox"/> N Is ground water used for drinking water within 4 miles?		Depth to shallowest aquifer on-site? <u>40</u> Feet
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N Karst terrain present?		Nearest designated wellhead protection area <input type="checkbox"/> Underlies site <input type="checkbox"/> >0 - 4 miles <input checked="" type="checkbox"/> None Within 4 miles
<input checked="" type="checkbox"/> Y <input type="checkbox"/> N Is there a high likelihood of release to ground water?		
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N Have likely contaminated drinking water wells been identified? If yes, enter potentially affected population # _____		
Population served by drinking water wells within the designated target distances. Note if the water supplies within that target distance radius are Private (P), Community (C) or Both (B).		
Distance (miles)	Population	Type of Supply (P, C or B)
On-site	0	

0 to 1/4	3	P
1/4 to 1/2	0	
1/2 to 1	176	B
1 to 2	4368	B
2 to 3	54	P
3 to 4	78	P

Description of wells (including usage, blending of water system, depth, age and location).

Eight public supply water wells for the City of Bristow are within the 4-mile TDL.

[X]Y []N Is ground water from any target well within the TDL, for the aquifer evaluated or overlying aquifers, used for the following resources: irrigation (5 acre minimum) of commercial food crops or forage crops, watering of commercial livestock, ingredient in commercial food preparation, supply for commercial aquaculture, supply for a major or designated water recreation area?

b. Surface Water Pathway	Ref. #(s)	TDL = 15 Stream Miles
[]Y [X]N Did you verify all surface water targets within 1 stream mile during the site visit?	Shortest overland distance from any source to surface water for each watershed 400 Feet _____ Miles	
[X]Y []N Is there a likelihood of a release to surface water? If yes, explain (e.g., water color, fish kills, stressed vegetation) Surface water passes through contaminated ponds and pits as it flows to Sand Creek	Site is located in <input type="checkbox"/> No floodplain <input type="checkbox"/> Annual - 10 yr floodplain <input checked="" type="checkbox"/> >10 yr - 100 yr floodplain <input type="checkbox"/> >100 yr - 500 yr floodplain <input type="checkbox"/> >500 yr floodplain	[]Y [X]N Did you observe any fishing or evidence of fishing in surface water bodies on or near the site? If yes, photodocument; specify the name of the water body and its distance from the site.
Annual Precipitation <u>8.91</u> inches	Two Year, 24-Hour Rainfall <u>4.25</u> inches	Type of surface water draining site and 15 miles downstream (check all that apply) <input checked="" type="checkbox"/> Stream <input type="checkbox"/> River <input type="checkbox"/> Pond <input type="checkbox"/> Lake <input type="checkbox"/> Bay <input type="checkbox"/> Ocean <input checked="" type="checkbox"/> Other <u>Intermittent</u>

Identify the surface water bodies and flow rates (cubic feet per second, cfs) along a 15 stream mile pathway for each watershed. Identify the uses of each surface water body as

DW = Drinking water
F = Fishery
FP = Ingredient in commercial food preparation
I = Irrigation of commercial food crops or commercial forage crops
L = Watering of commercial livestock
N = None of the above, specify
R = Major or designated recreation area

Surface Water Body	Begin to End Distance	Stream Flow in cfs	Use(s)
Intermittent creeks	0-0.4		
Sand Creek	0.4-3.5	50 cfs	F,R
Little Deep Fork Creek	3.5-15	400 cfs	F,R

[]Y [X]N Any drinking water intakes located along 15 mile TDL? If yes, identify the population served by surface water intakes along the 15 stream mile pathway in the table below.	[X]Y []N Probable Point of Entry (PPE) located and noted on site sketch? (PPE is the point where runoff from the site most likely enters surface water)
--	--

Surface Water Body	Distance to Intake from PPE	Population Served

[] Y [X] N/Unk Is drinking water system blended? If possible, make a note of percentages of contribution to system per intake.

List all Fisheries

Water Body/Fishery Name	Flow (cfs)	On-Site or Distance from PPE	Pounds Fish/Year*
Sand Creek	50	PPE	>0 lb/yr
Little Deep Fork Creek	400	3.5	>0 lb/yr

* Estimate pounds per year of fish, shellfish, etc. collected from each fishery and enter the correct range in the above table.
 0 lbs 10,000 to 100,000
 > 0 to 100 100,000 to 1,000,000
 100 to 1,000 >1,000,000 Specify _____
 1,000 to 10,000

[X] Y [] N Wetlands (as defined in 40 CFR Section 230.3) located along the surface water migration path?
 If yes, list Wetlands

Water Body	Flow (cfs)	Frontage Miles
PF01A (Sand Creek)		.25
PF01A (Little Deep Fork Creek)		8.5

[] Y [] N Other Sensitive Environments (see 40 CFR Part 300, Section 4.1, Table 4-23) located along the surface water migration path?
 If yes, list below

Sensitive Environments Type	Water Body Type	Distance From PPE/On-Site?

<input type="checkbox"/> Y <input checked="" type="checkbox"/> N Is surface water used for one or more of the following resources within the TDL: irrigation of commercial food or forage crops (≥ 5 acres), watering commercial livestock, ingredient in commercial food preparation, supply for a major or designated water recreation area?	
c. Soil Exposure Pathway Ref. #(s) _____	
TDL = 1 Mile Radius	
<input checked="" type="checkbox"/> Y <input type="checkbox"/> N During the site visit, were targets within 500 feet field verified?	Number of residents who reside within 200 ft. of known or suspected contamination <u>5</u>
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N School or daycare located within 200 feet of known or suspected contamination? If yes, enrollment <u>Church is on-site</u>	Number of workers on-site <input type="checkbox"/> None <input checked="" type="checkbox"/> 1 - 100 <input type="checkbox"/> 101 - 1,000 <input type="checkbox"/> >1,000
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N Are one of the following present in an area of observed contamination at the site: commercial agriculture, silviculture, livestock production or livestock grazing?	
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N Have Terrestrial Sensitive Environments been identified on or within 200 feet of known or suspected contamination? If yes, list each Terrestrial Sensitive Environment (see 40 CFR Part 300, Section 5.1, Table 5-5).	
d. Air Pathway Ref. #(s) _____	
TDL = 4 Mile Radius	
<input checked="" type="checkbox"/> Y <input type="checkbox"/> N During the site visit, were air targets within 1/2 mile field verified?	Distance to nearest regularly occupied building or individual resident _____ Feet _____ Mile
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N Evidence of blowing dust during site visit? <input type="checkbox"/> Y <input checked="" type="checkbox"/> N Odors detected while on-site? <input type="checkbox"/> Y <input checked="" type="checkbox"/> N Observed or suspected release to air? If observed, photodocument.	Enter total population on or within <u>5</u> On-site <u>57</u> 0 - 1/4 Mile <u>495</u> > 1/4 - 1/2 Mile <u>1,836</u> > 1/2 - 1 Mile <u>2,691</u> > 1 - 2 Miles <u>1,917</u> > 2 - 3 Miles <u>517</u> > 3 - 4 Miles <u>6,618</u> Total Within 4 Miles
Predominant wind direction _____	
Are there schools within the 1 mile radius? If yes, Enrollment _____ # Employees _____	
<input checked="" type="checkbox"/> Y <input type="checkbox"/> N Wetlands located within 4 miles of site?	

Estimate the total wetlands area (acres) <input type="checkbox"/> <1 <input type="checkbox"/> 1 - 50 <input type="checkbox"/> 50 - 100 <input type="checkbox"/> 150 - 200 <input type="checkbox"/> 200 - 300 <input type="checkbox"/> 300 - 400 <input type="checkbox"/> 400 - 500 <input type="checkbox"/> >500 acres	List all sensitive environments within 1/2 mile of the site <table border="1"> <thead> <tr> <th><u>Distance</u></th> <th><u>Sensitive Environment Type</u></th> </tr> </thead> <tbody> <tr> <td>On-site</td> <td>None</td> </tr> <tr> <td>0 - 1/4 Mile</td> <td></td> </tr> <tr> <td>>1/4-1/2 Mile</td> <td></td> </tr> </tbody> </table>	<u>Distance</u>	<u>Sensitive Environment Type</u>	On-site	None	0 - 1/4 Mile		>1/4-1/2 Mile		<input type="checkbox"/> Y <input type="checkbox"/> N Are one of the following resources present within 1/2 mile of a source on-site: commercial agriculture, silviculture, a major or designated recreation area (including a park)?
<u>Distance</u>	<u>Sensitive Environment Type</u>									
On-site	None									
0 - 1/4 Mile										
>1/4-1/2 Mile										

PART X - SOURCES OF INFORMATION

Below cite specific information references by number, i.e. state files, sample analysis, ROCs, reports, etc. At the beginning of each section of this checklist, there is a space to enter the #(s) of each reference used in that section.

1. EPA Site Access Request for Expedited Site Inspection. Sent to (b) P.O. Box 659, Bristow, Oklahoma, 74010. 8/6/96
2. Memorandum. "Potentially Responsible Party (PRP) Search." To the Wilcox Oil Company Site. From: David Cates, Superfund (Site Assessment Unit). 12/12/94.
3. Expanded Site Inspection Report for Wilcox Oil Company. Prepared by Roy F. Weston, Inc. for the EPA, Region VI. March 1997.

Source Characterization Form

DRUMS

Number of drums _____

On pallets ([]Y []N) # _____

Leaking ([]Y []N) # _____

Stained soil ([]Y []N)

Empty/full/both # ea. _____

Explosion hazard ([]Y []N)

Condition of drums:

Containment (describe):

Maintenance (explain):

Labels ([]Y []N) (describe):

Accessibility (fenced, etc.):

Residents/schools/daycare/workers within 200 feet (explain and indicate distances):

Comments:

Photodocument and note locations on site sketch.

Source Characterization Form

TANKS

Aboveground _____
Active/Inactive

Underground _____
Active/Inactive

Nondrum Containers _____

How many of each and sizes:

Permitted/registered (indicate per tank):

Leakage ([]Y []N) (indicate per tank):

Containment (adequate diking, secondary containment capacity <> capacity of tank, etc.):

Waste stream in tanks/container:

Accessibility (fenced, etc.):

Residents/schools/daycare/workers within 200 feet (distance):

If tanks have been removed, obtain information about removal.

Comments:

Photodocument and note locations on site sketch.

Source Characterization Form

PILES

Number of piles 4Size* 2200 yd² (Church)Type/Contents: wastes from refinery operations (TPH)Size* 750 yd² (b) residenceType/Contents: TPHSize* 1100 yd² (unvegetated area)Type/Contents: TPHSize* 750 yd² (b) residenceType/Contents: TPH

* estimate area or give dimensions (note how measurements were taken i.e., pacing, tape measure, reference, etc.)

Process(es) responsible for piles:

refining, storage, transport, and disposal of facility products and wastes

Containment (covered, etc.):

None

Evidence of migration? via Air: via Water: X

Describe:

Could migrate by runoff

Evidence of erosion (describe):

Accessibility (fenced, etc.):

Sample data:

Residents/schools/daycare/workers within 200 feet (distance):

Comments:

Photodocument locations and sketch location of piles on site sketch.

Source Characterization Form

STAINED SOILS

Number of areas 11 tank bottoms ranging from 150-300 feet in diameter

Size * (s) 1) Volumes range from 1000-55000 barrels

Size * (s) 2) Contents of former tanks include crude oil, fuel oil, gasoline, naphthane, and kerosene.

Size * (s) 3)

Size * (s) 4) 4/11 tanks are still present

Size * (s) 5) Most of the berms for ASTs have been removed

Many areas contain oil, tarry, and black asphalt-like materials.

*Size = estimate area or give dimensions

Method of measurement (pacing, metal tape measure, reference, etc.):

Is the stained soil in a drainage ditch (pathway) leading off-site? (explain):

0

Source of contamination for each stained area (indicate by number):

Sample data:

Accessibility (fenced, etc.):

Residents/school/daycare/workers within 200 feet (distance):

Comments:

Photodocument and sketch areas of stained soils on site sketch.

Source Characterizations Form

IMPOUNDMENTS

Size* 4 impoundments: 8,300yd², 33,300yd², 7,800yd², 3,300yd² Liquid (☐ Y ☐ N) Overflow (☐ Y ☐ N) Buried/backfilled (☐ Y ☐ N)

Freeboard (ft) _____

Diking/berms (☐ Y ☐ N) condition:

Leachate (☐ Y ☐ N)

Lined (☐ Y ☐ N) type:

Permitted discharge:

Dates of operation:

Waste quantity:

Type of waste:

Pond 1: 250×100 ft. backfilled without berms; has oily seeps

Pond 2: 400×250 ft. berm in SW corner has been cut which allows surface water to break impoundment; pond has grasses and shallow water.

Pond 3: 300 ft. diameter; contains black, tarry material; SW portion of the berm has been cut allowing run-off to breach the pit; strong tar odors.

(b) (6): 10,000 ft²; intermittent creek flows through pond; contains some black-asphalt materials.

Containment (engineered, integrity - describe):

Observed/evidence that contents of impoundment have entered surface water (☐ Y ☐ N) (explain):

Accessibility (fenced, etc.):

Residents/school/daycare/workers within 200 feet (distance):

Sample data:

Uses recreational:

Comments:

*Size: Note dimensions, area, or volume and method of measurement or reference.

Photodocument and sketch impoundments on site sketch.

Source Characterization Form

FIRES/BURN PITS

Fire/Burn Pits active ([] Y [] N)

Number of pits _____

Are burns controlled/monitored (explain):

Size(s):

Method of measurement (pacing, metal tape measure, reference, etc.):

Waste stream being burned:

Containment (describe):

Run-on/runoff controls:

Migration evident (explain): **PHOTOGRAPH**

Accessibility (fenced, etc.):

Resident/school/daycare/workers within 200 feet (indicate distance):

Comments:

Photodocument and sketch fire/burn pits on site sketch.

Source Characterization Form

LANDFILL

Size* _____ Years in operation _____

Waste Stream/Quantity: (Type I, II, III, IV)

Erosion (wind/water, indicate locations):

Evidence of biogas ([]Y []N) describe:

Run-on/runoff Control ([]Y []N) describe:

Ponding water ([]Y []N) describe:

Lined ([]Y []N) type/construction:

Covered ([]Y []N) (engineered?) Thickness/construction/material:

Illegal dumping ([]Y []N) evidence:

Waste accepted:

Manifests available? ([]Y []N) Obtain copies.

Leachate ([]Y []N) describe:

Leachate controls ([]Y []N) describe:

Public use (recreation, etc.):

Accessibility (fenced, etc.):

Sampling/monitoring data/evidence:

Residents/schools/daycare/workers within 200 feet (distance):

Comments:

* Specify area or dimensions or estimate volume from operation records.
Photodocument location and sketch landfill features on site sketch.

Source Characterization Form

OTHER

Description of source (be specific):

Size of source (volume, area or waste stream):

Method of measurement (pacing, metal tape measure, etc.):

Type of waste managed:

Evidence of hazardous substance migration from source:

Containment (describe):

Maintenance:

Accessibility:

Residents/schools/daycare/workers within 200 feet (explain and indicate distances):

Photodocument and note locations on site sketch.

Source Characterization Form

LANDFARM/LAND TREATMENT

Method of measurement (pacing, metal tape measure, reference, etc.):

Evidence of hazardous substance migration from land treatment zone:

Is land treatment area maintained in compliance with 40CFR.264.280? ([]Y []N) explain:

Describe run-on control and runoff management system:

Describe presence or absence of vegetative cover:

Type of waste managed:

Quantity of waste managed (as provided):

_____ daily _____ weekly _____ monthly or _____ yearly

Sample data:

Photodocument and note locations on site sketch.

Ben Martich

Print Originator's Name

Ecology and Environment, Inc.

RECORD OF COMMUNICATION

Conversation with:	Date <u>06 / 20 / 97</u> (Mo) (Day) (Year)
Name: (b) (6)	Time: 11:00 AM
Address: 1st. Assembly Church of God	<input checked="" type="checkbox"/> Originator Placed Call
Phone: (b) (6)	<input type="checkbox"/> Originator Received Call
Subject: Concerns with former Wilcox Refinery	
<p>Discussion:</p> <p>(b) (6) is the church deacon. He helped install a water well in 1989. A charcoal filter was used with the well, but it made little difference. The water continually had a high hydrocarbon content. The church abandoned the well in 1990 and went back to city water. (b) (6) said surface water entering the well was the main problem with the contamination. The well has been capped off and the pumphouse is locked.</p> <p>Other concerns: when the city installed a new water line they came across a 2 feet steel line leaking crude. Concrete foundations are located in many places around the church just beneath the surface. Stained soil is all around and runoff always has a sheen. Also, (b) (6) says it is very difficult to get grass to grow.</p>	
Follow-Up-Action:	
Originator's Signature _____	

Ben Martich

Print Originator's Name

Ecology and Environment, Inc.

RECORD OF COMMUNICATION

Conversation with:	Date <u>06</u> / <u>18</u> / <u>97</u> (Mo) (Day) (Year)
Name: (b) (6)	Time: 1:00 PM
Address:	<input checked="" type="checkbox"/> Originator Placed Call
Phone (b) (6)	<input type="checkbox"/> Originator Received Call
Subject: his property at former Wilcox Refinery	

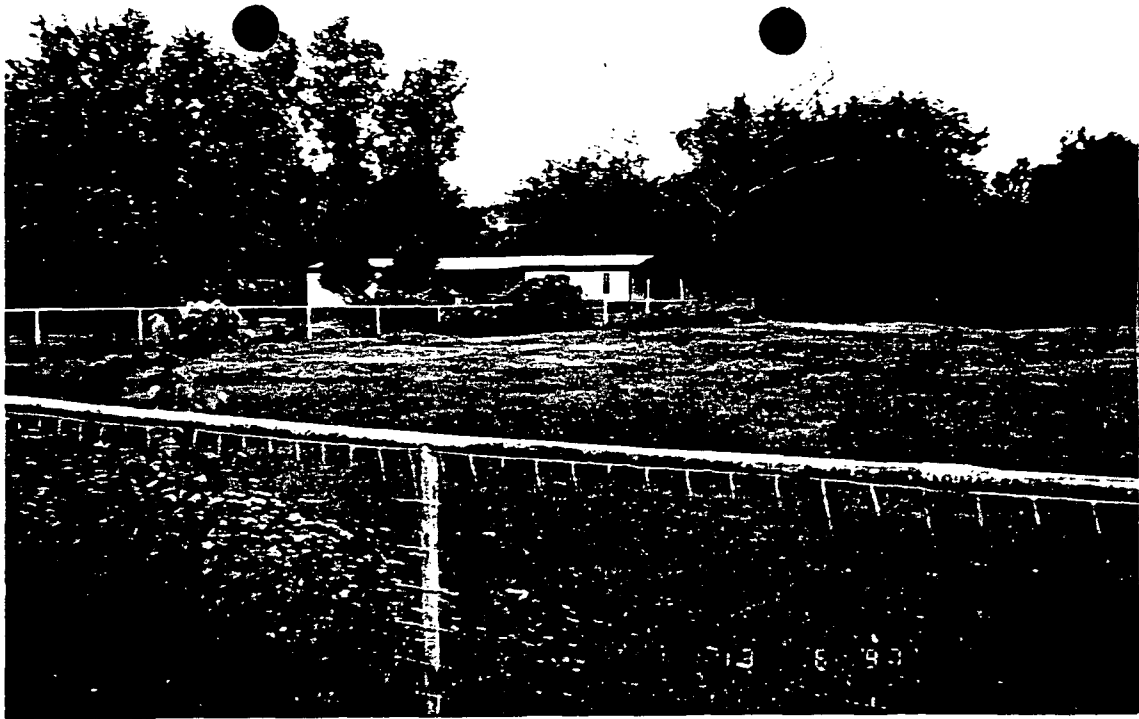
Discussion:

Spoke with **(b) (6)** concerning ground water usage and possible air/soil contamination. He has an active well on his property but he does not use it because the water has a high gasoline (petroleum) content. He says the contamination is occurring in the 45-Foot aquifer that is saturated with hydrocarbons. The 85-Foot aquifer, in which the well is screened, is clean he says. **(b) (6)** also informed me that well is not sealed off and can be easily utilized. **(b) (6)** son and his wife live in the residence at the site; they are on City (Bristow) water.

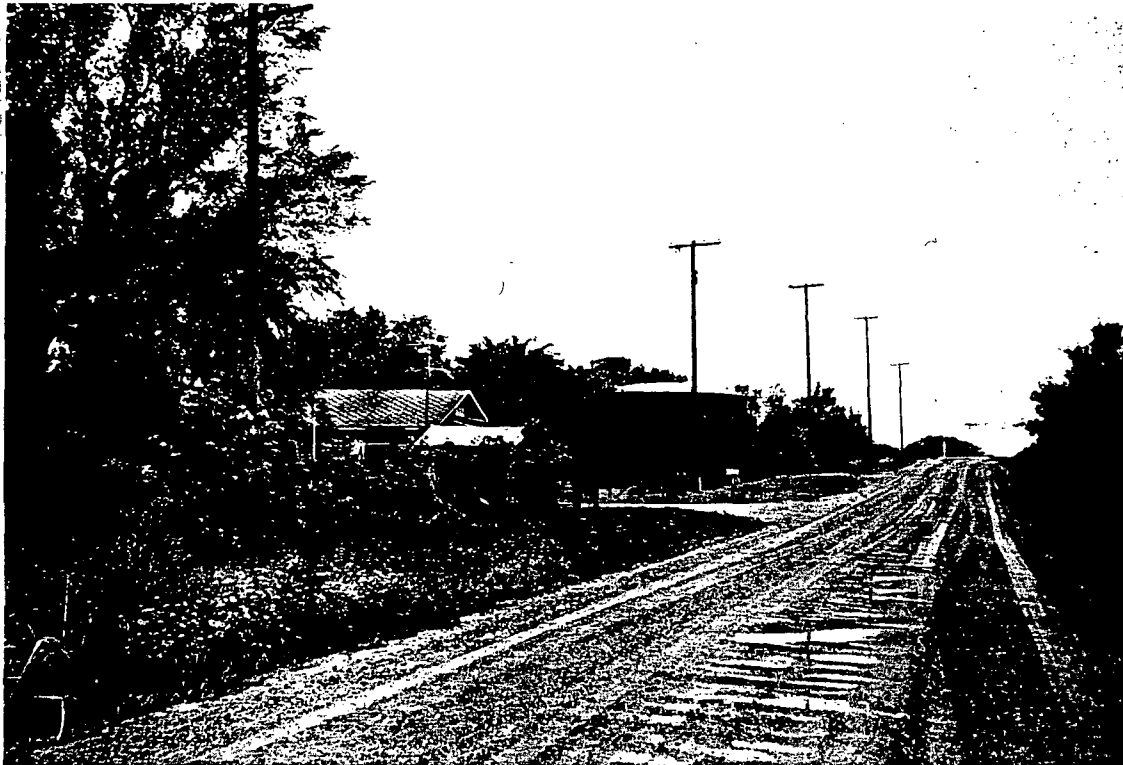
(b) (6) other complaints were that it took him 15 years to grow a tree on the property and an impoundment that he believes contains an acid-laced sludge. He says the sludge will deteriorate anything.

Follow-Up-Action:

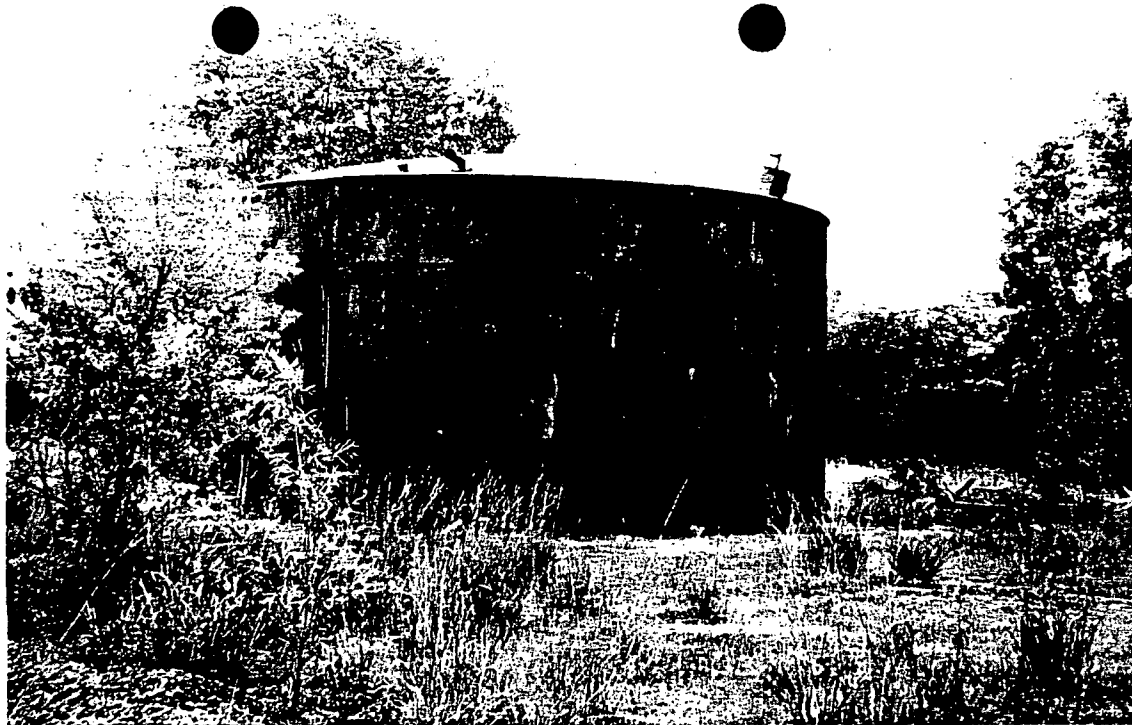
Originator's Signature _____



SITE NAME: Wilcox Refinery TDD#: S06-9606-026
 PHOTO#: 101 PHOTOGRAPHER/WITNESS: Ben Martich/David Crow
 DATE: 06/13/97 TIME: 0827 DIRECTION: Southwest
 The (b) residence (on-site).



SITE NAME: Wilcox Refinery TDD#: S06-9606-026
 PHOTO#: 102 PHOTOGRAPHER/WITNESS: David Crow/Ben Martich
 DATE: 06/13/97 TIME: 0929 DIRECTION: West
 The (b) residence (on-site) with abandoned oil storage tanks in the background.



SITE NAME: Wilcox Refinery TDD#: S06-9606-026
 PHOTO#: 103 PHOTOGRAPHER/WITNESS: David Crow/Ben Martich
 DATE: 06/13/97 TIME: 0901 DIRECTION: South
 Abandoned oil storage tank located in the northwestern portion of the site.



SITE NAME: Wilcox Refinery TDD#: S06-9606-026
 PHOTO#: 104 PHOTOGRAPHER/WITNESS: David Crow/Ben Martich
 DATE: 06/13/97 TIME: 0945 DIRECTION: Southwest
 1st Assembly Church of God located in the northwestern corner of the site.